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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09.629,830	07/31/2000	Aldo P. Ferreira	3673-4	5008

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NIXON & VANDERHYE, PC
1100 N GLEBE ROAD
8TH FLOOR
ARLINGTON, VA 22201-4714

EXAMINER

SANGHAVI, HEMANG

ART UNIT	PAPER NUMBER
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2874

DATE MAILED: 02/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

09/629,830

Applicant(s)

FERREIRA ET AL.

Examiner

Hemang Sanghavi

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 05 February 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 12 and 13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 14-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>5</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Applicant's election of the Group I invention (claims 1-11 and 14-20) in Paper No. 7 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Specification

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-11 and 14-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In lines 2-3 of claim 1, "the application of the evanescent field" lacks antecedent basis. Similarly, in line 5 of claim 1, "the evanescent field" lacks antecedent basis, since the evanescent field is not an inherent property of the optical fiber.

In line 6 of claim 1, the phrase "using an appropriate technique based on physical chemical properties" renders the scope of the claim unascertainable.

In line 8 of claim 1, there is no antecedent basis for the term "the immediate contact".

In line 9 of claim 1, "the sample" lacks antecedent basis.

In line 16 of claim 1, the phrase "an appropriate method" renders the scope of the claim unascertainable, since it is unclear as to what constitutes "the appropriate method".

In lines 1-2 of claims 4 and 5, "the time of the treatment" lacks antecedent basis.

In line 3 of claim 4, "the sheath" lacks antecedent basis.

In line 4 of claim 4, "the core" lacks antecedent basis.

In line 1 of claim 6, "the sample" lacks antecedent basis.

In line 3 of claim 6, "the culture medium" lacks antecedent basis.

In claim 9, "the contact" and "the medium" lack antecedent basis.

In lines 1-2 of claim 11, "the monitoring of the environment" lacks antecedent basis.

In claim 14, "the 2x1 type" and "2x2 type" lack antecedent basis.

In lines 15 and 19 of claim 14, "the photodetector" lacks antecedent basis.

In claim 15, "the 2x1 type" and "the 2x2 type" lack antecedent basis.

In lines 18 and 22 of claim 15, "the photodetector" lacks antecedent basis.

In lines 25-26 of claim 15, "the Fabry-Perot type interferometer" lacks antecedent basis.

In claim 16, "the 2x1 type" and "the 2x2 type" lack antecedent basis.

In lines 19 and 21 of claim 16, "the photodetector" lacks antecedent basis.

In lines 23-24 of claim 16, there is no antecedent basis for "the Michelson type interferometer".

In claim 17, "the 2x1 type" and "the 2x2 type" lack antecedent basis.

In lines 20 and 26 of claim 17, "the photodetector" lacks antecedent basis.

In line 28 of claim 17, "the Mach-Zehnder type interferometer" lacks antecedent basis.

Applicant is requested to clearly define similar elements (i.e., a first fiber, a second fiber, a first photodetector, a second photodetector) and maintain the essential structural cooperative relationships of elements in the claims.

Claims 2-3, 7-8, 10, and 18-20 are necessarily rejected, since these claims directly or indirectly depend upon the rejected base claims and include the same deficiency.

Allowable Subject Matter

Claims 1-11 and 14-20 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Eden, Shimakita et al, Grow, and Mitchell disclose different methods for detecting microorganisms using an optical fiber or an optical waveguide.

The prior art submitted by applicant has been considered. See attached copy of form PTO-1449.

Art Unit: 2874

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hemang Sanghavi whose telephone number is 703-305-3484. The examiner can normally be reached on Monday-Thursday (8:30 AM-6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on 703-308-4819. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.



Hemang Sanghavi
Primary Examiner
Art Unit 2874

hs
February 23, 2003